

**Yellowstone National Park**  
**Wyoming / Idaho / Montana**

**National Park Service**  
**U.S. Department of the Interior**

UPB



Yellowstone National Park is a treasure that inspires awe in travelers from around the world. New Zealand and Iceland are known for their geysers, but nowhere are there as many as in Yellowstone. At the heart of Yellowstone's past, present, and future lies volcanism. About 2 million years ago, then 1.2 million years ago, and then again 600,000 years ago, catastrophic volcanic eruptions occurred here. The latest eruption spewed out nearly 240 cubic miles of debris. What is now the park's central portion then collapsed, forming a 28- by 47-mile caldera, or basin. The magmatic heat powering these eruptions still powers the park's famous geysers, hot springs, fumaroles, and mud pots. The spectacular Grand

Canyon of the Yellowstone River provides a glimpse of Earth's interior: its waterfalls highlight the boundaries of lava flows and thermal areas. Rugged mountains flank the park's volcanic plateau, rewarding both eye and spirit. Yellowstone's wildlife includes the American bison, elk, grizzly and black bears, trumpeter swans, and Yellowstone cutthroat trout. A variety of vegetation types is encountered, from near-desert vegetation around the North Entrance to subalpine meadows and forests on Mt. Washburn. Lodgepole pine covers about 60 percent of the park and constitutes about 80 percent of the forested areas. Yellowstone would be a premier national park for its scenery or its wildlife alone, but its history

also resonates with colorful tales of fur trappers—Jim Bridger and Osborne Russell—and explorers and surveyors, with their photographs and artists. William Henry Jackson's photographs and Thomas Moran's sketches influenced Congress to establish Yellowstone as the world's first national park in 1872. This national park idea has now become a land-use model for many nations, and Yellowstone has evolved from a pleasing ground and wildlife refuge to be recognized today as an International Biosphere Reserve and World Heritage Site as well. The guide below can help you choose what to see within the time limits of your Yellowstone visit. We hope it will make your travel more

efficient and rewarding. The guide presents capsule advice on three segments of the park's Grand Loop. This figure 8 shaped road system was designed to present the park's major attractions to travelers. Facilities and services are shown on the maps, and may also be found in the gateway communities—Jackson and Cody, Wyo., and West Yellowstone, Gardiner, Silver Gate, and Cooke City, Mont. Ask at the visitor centers for other publications to help you explore the park. And remember: Park roads sample but a fraction of Yellowstone National Park. The rest is backcountry—traversed by 1,000 miles of trails.

A Guide to the Park and Its Wildlife



Where to Watch for Wildlife

The best time to see wildlife in Yellowstone is during the summer months, from June through September. The Hayden Valley, between Fishing Bridge and Canyon, and Pelican Creek east of Fishing Bridge are prime viewing areas. Watch for bison in the Hayden Valley, and waterfowl

at the Lamar Valley. Watch for elk, bison, pronghorn, and coyotes in the Lamar Valley, and bighorn sheep in the Snake River Canyon. Watch for bison in the Hayden Valley, and waterfowl

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Bear Warning

Black and brown bears are the most dangerous animals in the park. They are not afraid of humans, and they will attack if they feel threatened. Do not feed bears, and do not approach them. If you see a bear, make a lot of noise, and do not run. If you are attacked, lie on the ground and play dead.

Seeing Yellowstone. How to Survive the Trip

Yellowstone is a vast park, and it is easy to get lost. Plan your route carefully, and make sure you have enough gas and food. Do not drink alcohol while driving, and do not use your cell phone while driving. If you get stuck, call for help.

Emergencies

If you have an emergency, call 911. If you are lost, call the park ranger. If you are injured, call the park ranger. If you are sick, call the park ranger. If you are in trouble, call the park ranger.

Old Faithful to Mammoth Hot Springs



One of the main routes to Old Faithful is from the south via Jackson, Wyo., and the South Entrance. The park road crosses the Continental Divide three times. Waters flow east of the divide to the Atlantic, or west to the Pacific. This park road passes two geyser basins: West Thumb, Upper Old Faithful, Midway Lower and Norris on its way to Mammoth Hot Springs. Sampling the world's largest concentration of geysers, you follow the boxtrail Firehole and Gibbon rivers. A visitor center at Old Faithful and a museum at Norris tell aspects of the park story.

Old Faithful Old Faithful Geyser is the world's best known geyser. Its eruption intervals have long varied around an average of 85 minutes, ranging from 32 to 120 minutes. A 1983 earthquake lengthened the interval's recent average from 69 to 76 minutes. Eruption times of other nearby geysers are available at the visitor center.

Old Faithful to Madison In Black Sand Basin the bright colors of Sunset Lake and Emerald Pool attract photographers. At Biscuit Basin mineral deposits look on biscuit shapes before a 1959 earthquake triggered changes, destroying the biscuits. At Midway Geyser Basin you may walk to Excelsior Geyser Crater and Grand Prismatic Spring. Firehole Lake Drive (one way northbound) loops off the main road to Great Fountain Geyser. Firehole Lake is a hot pool and the Three Senses Trail. The Lower Geyser Basin features the Fountain Paint Pots. Fountain Flies Drive exits west and ends at Cooke Lake. Firehole Canyon road drive (one way southbound) starting south of Madison Junction passes by Firehole Falls. The museum at Madison Junction portrays the evolution of the national park idea. Roadside forests are mainly lodgepole pine, some reddened by the loading of mountain pine beetles. West Yellowstone, Mont., is 14 miles west of Madison Junction. From Madison to Norris you drive along the Yellowstone caldera's north rim. Gibbon Falls cascades over the caldera wall.

Norris Junction to Mammoth Hot Springs Norris Geyser Basin's array of thermal features is unparalleled. Steamboat Geyser, the world's tallest, erupts at irregular intervals of days to years. Echinus Geyser erupts about once per hour. Porcelain Basin is Yellowstone's hottest exposed area. Exhibits at Norris Museum explain geyser workings. At Norris Junction you can turn east toward the Canyon area. At Canyon you can go north to Tower of Bunsen Peak. Two miles south of Mammoth Hot Springs the Upper Terrace Loop Drive passes through a fascinating thermal area. Geared limousines take you on scenic tours. Geysers are over 500 years old. At Mammoth Hot Springs the terraces are spectacular. Invertebrate calcium carbonate formations deposited there. Most new rock from Yellowstone's geysers is called geyserite, a noncrystalline mineral chemically similar to glass. Exhibits at Bighorn Visitor Center portray the park's early history and wildlife and tell how the U.S. Army protected the park from 1886 to 1916. Park headquarters are in the buildings of Ft. Yellowstone, a late 19th-century cavalry post. Gardiner, Mont., lies 5 miles north. The Yellowstone River flows north eventually to join the Missouri.

To Tower Junction and Canyon

The road east from Mammoth Hot Springs leads you 4 miles to Tower Falls. Then 0.2 miles to Lava Creek (picknicking). Three miles further east look for waterfalls and meadows at Blacktail Ponds. Near Blacktail Ponds you may walk to Excelsior Geyser Crater and Grand Prismatic Spring. Firehole Lake Drive (one way northbound) loops off the main road to Great Fountain Geyser. Firehole Lake is a hot pool and the Three Senses Trail. The Lower Geyser Basin features the Fountain Paint Pots. Fountain Flies Drive exits west and ends at Cooke Lake. Firehole Canyon road drive (one way southbound) starting south of Madison Junction passes by Firehole Falls. The museum at Madison Junction portrays the evolution of the national park idea. Roadside forests are mainly lodgepole pine, some reddened by the loading of mountain pine beetles. West Yellowstone, Mont., is 14 miles west of Madison Junction. From Madison to Norris you drive along the Yellowstone caldera's north rim. Gibbon Falls cascades over the caldera wall.

Tower Junction to Northeast Entrance Lamar Valley accessible all year, is winter range for elk and bison. You may camp at Slough Creek or Pabian Creek campgrounds on route to the Northeast Entrance. 29 miles from Tower Junction. Beyond the Silver Gate, 1 mile and Cooke City (4 miles). Mont. and the Bearfoot Highway climbs to 10,940 feet at Bearfoot Pass.

Tower Junction to Canyon Tower Falls, tumbling 132 feet, was named for the ancient volcanic geysers. Tower Creek flows into the Yellowstone River. South from Tower Falls as you drive up Mount Washburn look east down into prime grizzly bear country on Antelope Creek. This area is closed to human travel to offer the bears refuge. DO NOT ATTEMPT TO FEED OR APPROACH BEARS. The main road next crosses Duran Pass at 8,850 foot elevation amidst broad-leaved whitebark pines and shore-shaped subalpine fir. Meadows produce a profusion of wildflowers during the brief summer. From the Washburn Hot Springs overlook south of the pass, you can see the Yellowstone caldera. Its north boundary is Mount Washburn and its south boundary is the Red Mountains 35 miles away. You can see the Tejon Range on clear days on the right beyond the Red Mountains. Canyon Because of bear activity here camping is restricted to hard-sided units only. Exhibits at the Canyon Visitor Center explain the park's geology. A 2.5 mile loop road (one way) leads into a spur road out to Ingraham Point. Here the Grand Canyon of the Yellowstone River plunges 1,000 feet below you. The canyon's colors were created by hot water acting on volcanic rock. It was not these colors, but the river's yellow banks at its distant confluence with the Missouri River that occasioned the Minnetanka Indian name which French trappers translated as *roche jaune*, yellow stone. The canyon has been rapidly downcut



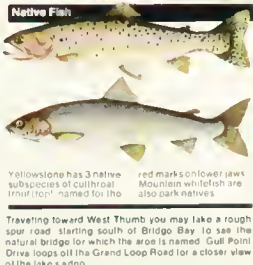
Early Visitors Yellowstone has been a mecca for travelers. The world's first national park was soon a popular site. More than once perhaps by great glacial outburst floods. Little deepening lakes place today. Grandview Point affords a distant view of the 308 foot Lower Falls. Lookout Point affords a view of Lower Falls and a steep trail descends to a closer viewpoint. Back on the main road, turn left in 0.3 miles to view the brink of the 109 foot Upper Falls. Back on the main road again, go 0.6 miles south to Antelope Point Road and cross Chittenden Bridge to Uncle Tom's Parking Area. Trails here offer close views of the Upper and Lower Falls. South Rim Drive leads to Antelope Point for another view of the Canyon and Lower Falls.

Hayden Valley The road here follows the Yellowstone River's meandering course a former lakebed. After the great glaciers retreated Yellowstone Lake was much larger than it is today, and this area was then flooded. The lake's fine silt and impalpable clay soil that permits little tree growth but allows rich shrubbery for your safety. No fishing is allowed for a 4.6 mile section in Hayden Valley. This provides quiet for the animals and views of untrammeled wildlife scenery for you. Stop at Mud Volcano and see the varied thermal features there. You might see spawning cutthroat trout jumping at La Hardy Rapids, 3 miles north of Lake Junction in June and July.

The Lake Area

East Entrance to Fishing Bridge Junction Cody, Wyo., lies 50 miles beyond the East Entrance. As you cross 8,530-foot elevation Sylvan Pass, watch for pikes and yellow-bellied marmots. Illustrated above. In the rocky debris of talus slopes. You descend the west slope of the Absarokee Mountains an eroded volcanic range named for the Crow Indians. Near Yellowstone Lake a spur road leads to Lake Butte Overlook for a view of this immense body of water. Yellowstone Lake occupies only the southeast quarter of the Yellowstone caldera (see top left). All the overlook you are 4 miles outside the caldera's east boundary. Just north of the lake the Earth's surface is rising about 0.9 inches per year! This suggests future volcanic activity here. As you drive along the lake's edge, you can see Steamboat Springs. This is a hot spring remnant located on a line of faults, or fractures. In the Earth, that also passes through Mary Bay and Indian Pond to the northeast. Bay and pond both occur geologically recent hydrothermal explosion craters. The bottom sediments in Mary Bay are still very warm. Watch for moose browsing in the sedge meadows and marshes along Pelican Creek flats as you approach Fishing Bridge area.

Exhibits at Fishing Bridge Museum feature the park's birds. Fishing Bridge itself spans the Yellowstone River, the lake's outlet. The bridge was closed to fishing in 1973. Fishing Bridge now offers one of the best wild trout spawning shows anywhere for most of the summer. While pelicans feed on the native cutthroat trout. Because of a high level of boat activity only hard-sided units are allowed to camp in the Fishing Bridge area. Yellowstone Lake is North America's largest mountain lake. Over geological time it has drained into the Pacific Ocean via the Arctic Ocean via Hudson Bay and now drains into the Atlantic via the Gulf of Mexico. It is 20 miles long, 14 miles wide, and 320 feet deep at its deepest point. The average depth is about 139 feet. Trout generally inhabit the upper 60 feet because that's where they can find the best food. The average surface temperature in August is about 60°F and the bottom temperature never rises above 42°F. Swimming is discouraged even where not prohibited. Such cold waters can cause potentially fatal hypothermia or hyperventilation in minutes. Boating is popular on calm park lakes. Permits required for all watercraft, and advice on canoeing and kayaking can be obtained at ranger stations at Lake Village or at Grand Village. A marina is at Bridge Bay and boat ramps are at Grand Village.

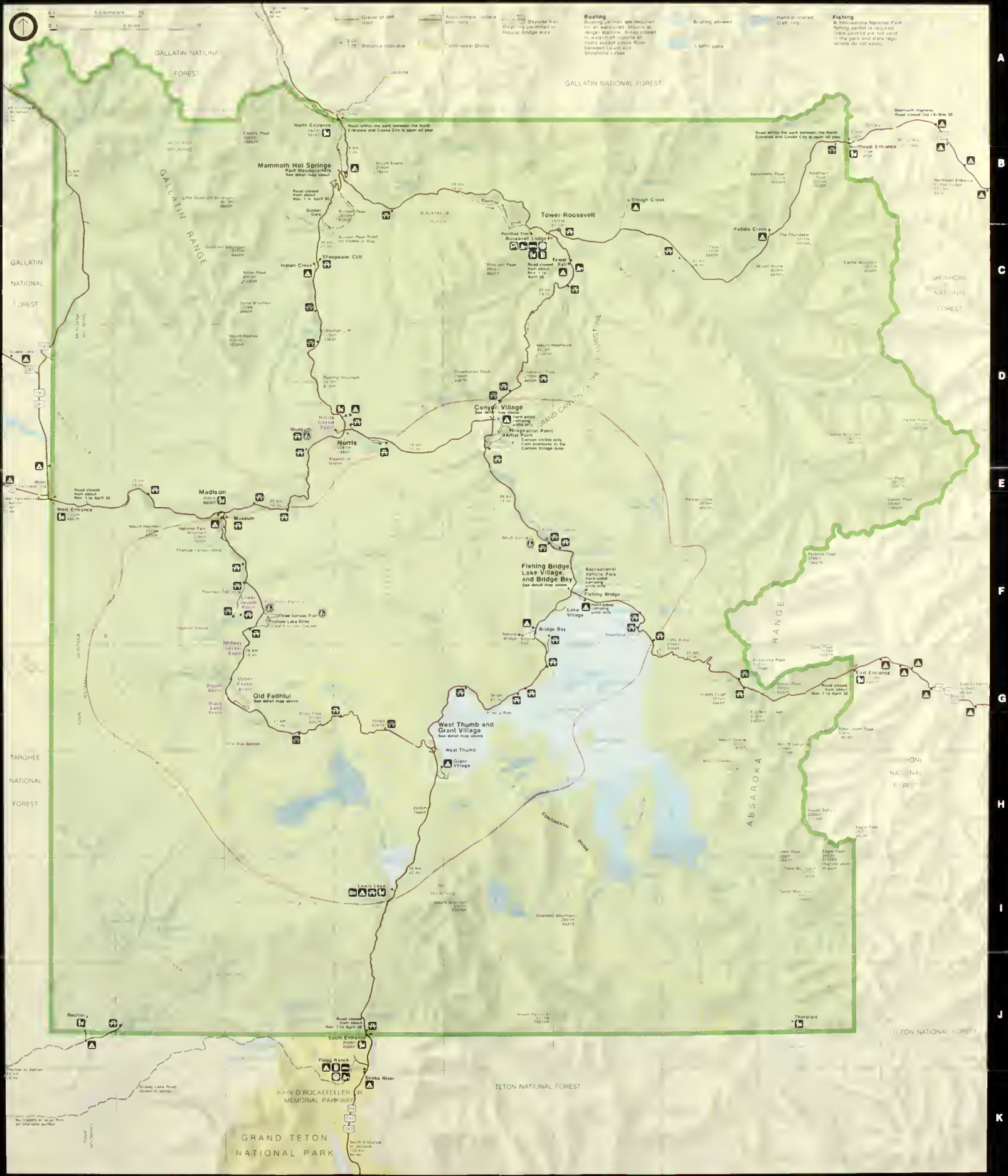
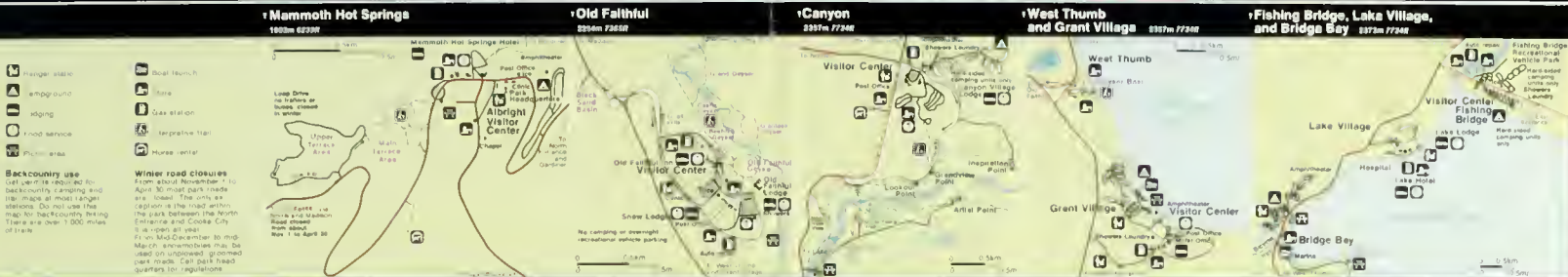


West Thumb and Grant Village Walk the boardwalk through the geyser basin at lake's edge at West Thumb. Measure heat measured in lake sediments below West Thumb indicates a shallow thermal system underlying this more recent caldera within the Yellowstone caldera. Should the lake level fall just a few feet, an immense steam/hydrothermal explosion could occur here. That is what created the craters now filled by Mary Bay and Indian Pond, located above. Exhibits at Grand Village Visitor Center, two miles south of West Thumb, feature the park's immense wilderness. Fishing boats, and backcountry use permits are available at the ranger station.



# Yellowstone

Useful Road Distances  
Grand Loop road 142mi  
Lower Loop road 86mi  
Upper Loop road 70mi  
Old Faithful to Canyon via Madison and Norris 42mi  
Old Faithful to Canyon via West Thumb and Lake Village 54mi  
Mammoth Hot Springs 90mi to South entrance via Madison and Old Faithful  
Fishing Bridge to 97mi to East Entrance via Tower and Canyon  
Mammoth Hot Springs 90mi to South entrance via Tower and Canyon  
Fishing Bridge to 97mi to East Entrance via Tower and Canyon



# Yellowstone

Official Map and Guide

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